

**ABSTRACT**

Please add the following abstract:

An elongated-shaped particle having two protrusions; each extending from and attached to a central position, wherein the central position is aligned along the longitudinal axis of the particle, the cross-section of the particle occupying the space encompassed by the outer edges of six circles around a central circle, in which each of the six circles touches two neighboring circles and two alternating circles are equidistant to the central circle and may be attached to the central circle, and the two circles adjacent to the two alternating circles (but not the common circle) touching the central circle, minus the space occupied by the four remaining outer circles and including four remaining interstitial regions.